

IN THE CLAIMS

Please add Claims 31 and 32 to read as follows.

1. (Previously Presented) A method for manufacturing an electron-emitting device, comprising:
 - a step for forming a solid-state insulating polymer film including a carbon atomic bond between a pair of electrodes formed on a substrate;
 - a step for heating said polymer film to change said polymer film into an electro-conductive film; and
 - a step for providing a potential difference between said pair of electrodes to energize electrically the electro-conductive film.
2. (Previously Presented) A method according to claim 1, wherein the step for heating includes a step for illuminating an electron beam onto at least a part of said polymer film.
3. (Previously Presented) A method according to claim 1, wherein the step for heating includes a step for illuminating light onto at least a part of said polymer film.
4. (Original) A method according to claim 3, wherein the light is light emitted from a xenon lamp as a light source.

5. (Original) A method according to claim 3, wherein the light is light emitted from a halogen lamp as a light source.

6. (Original) A method according to claim 3, wherein the light is a laser beam.

7. (Original) A method according to claim 1, wherein said polymer film is an aromatic polymer film.

8. (Original) A method according to claim 1, wherein the step for forming a polymer film utilizes an ink jet system.

9. (Previously Presented) A method for manufacturing an electron-emitting device, comprising:

a step for forming a solid state polymer film including a carbon atomic bond between a pair of electrodes formed on a substrate;

a step for heating said polymer film to change the polymer film into an electro-conductive film having an electrical resistance lower than that of the polymer film; and

a step for providing a potential difference between said pair of electrodes to energize electrically said electro-conductive film.

10. (Previously Presented) A method according to claim 9, wherein the step for heating said polymer film includes a step for illuminating an electron beam onto at least a part of said polymer film.

11. (Previously Presented) A method according to claim 9, wherein the step for heating said polymer film includes a step for illuminating light onto at least a part of said polymer film.

12. (Original) A method according to claim 11, wherein the light is light emitted from a xenon lamp as a light source.

13. (Original) A method according to claim 11, wherein the light is light emitted from a halogen lamp as a light source.

14. (Original) A method according to claim 11, wherein the light is a laser beam.

15. (Original) A method according to claim 9, wherein the step for forming a polymer film utilizes an ink jet system.

16. (Previously Presented) A method for manufacturing an electron-emitting device, comprising:

a step for forming a polymer film including a carbon atomic bond between a pair of electrodes formed on a substrate;

a step for illuminating an electron beam onto at least a part of said polymer film; and

a step for providing a potential difference between said pair of electrodes.

17. (Original) A method according to claim 16, wherein the step for illuminating the electron beam onto said polymer film includes a step for giving conductivity to at least a part of said polymer film.

18. (Original) A method according to claim 16, wherein the step for illuminating the electron beam onto said polymer film includes a step for reducing electrical resistance of said polymer film.

19. (Original) A method according to claim 16, wherein said polymer film is an aromatic polymer film.

20. (Original) A method according to claim 16, wherein the step for forming a polymer film utilizes an ink jet system.

21. (Previously Presented) A method for manufacturing an

electron-emitting device, comprising:

a step for forming a polymer film including a carbon atomic bond between a pair of electrodes formed on a substrate;

a step for illuminating light onto at least a part of said polymer film;

and

a step for providing a potential difference between said pair of electrodes.

22. (Original) A method according to claim 21, wherein the step for illuminating light onto said polymer film includes a step for giving conductivity to at least a part of said polymer film.

23. (Original) A method according to claim 21, wherein the step for illuminating light onto said polymer film includes a step for reducing electrical resistance of said polymer film.

24. (Original) A method according to claim 23, wherein the light is light emitted from a xenon lamp as a light source.

25. (Original) A method according to claim 23, wherein the light is light emitted from a halogen lamp as a light source.

26. (Original) A method according to claim 23, wherein the light is a laser beam.

27. (Original) A method according to claim 21, wherein said polymer film is an aromatic polymer film.

28. (Original) A method according to claim 21, wherein the step for forming a polymer film utilizes an ink jet system.

29. (Previously Presented) A method for manufacturing an electron source having a plurality of electron-emitting devices, wherein:

each electron-emitting device is manufactured in accordance with the method according to any one of claims 1 to 28.

30. (Original) A method for manufacturing an image-forming apparatus having an electron source including a plurality of electron-emitting devices, and an image-forming member for forming an image by illumination of electron emitted from said electron source, wherein:

said electron source is manufactured by a method according to claim 29.

31. (New) A method for manufacturing an electron-emitting device, comprising:

a step for forming a polymer film without including a metal and a non-metal conductive material between a pair of electrodes formed on a substrate;

a step for heating the polymer film to change the polymer film into an electro-conductive film; and

a step for providing a potential difference between the pair of electrodes.

32. (New) A method for manufacturing an electron-emitting device, comprising:

a step for forming a polymer film without including a metal and a non-metal conductive material between a pair of electrodes formed on a substrate;

a step for heating the polymer film to reduce an electrical resistance of the polymer film; and

a step for providing a potential difference between the pair of electrodes.